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September 24, 1997

RECEIVED

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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

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Mr. William F. Caton
Acting Secretary
Federal Communications Commission
1919 M Street, N.W.
Washington, DC 20554

RE: Notification of Oral Ex Parte Communication: Implementation of the Pay Telephone Reclassification and Compensation Provisions of the Telecommunications Act of 1996 -- CC Docket No. 96-128

Dear Mr. Caton:

Yesterday, on September 23, 1997, Teresa Marrero, Senior Regulatory Counsel, and I met with Greg Lipscomb and Craig Stroup of the Enforcement Division of the Common Carrier Bureau to discuss the default rate for dial-around payphone calls. The discussion followed the outline attached. TCG also distributed the attached graph and independent payphone analysis by Equity Research.

An original and one copy of this letter are being submitted in accordance with Sec. 1.1206(b)(2) of the Commission's rules.

Thank you very much for your assistance in this matter.

Sincerely,

Judith Herrman

Judith E. Herrman
Manager, Federal Regulatory Affairs

cc: Greg Lipscomb
Craig Stroup

021

# THE SEPARABILITY OF COSTS IN THE PROVISION OF PUBLIC TELEPHONES IS NOT A PRACTICAL REALITY IN THE PUBLIC COMMUNICATIONS MARKETPLACE

- **THE PLACEMENT OF MULTI-PAYMENT PUBLIC TELEPHONES IS IN THE PUBLIC INTEREST.**

  **- Customers and site providers expect more, not less, payment options.**

  **- Multi-payment phones may provide only phone access in low-penetration areas.**

- **THE FCC'S VARIOUS OPERATOR SERVICE RULINGS CREATED A MIGRATION OF CALL TYPES FROM REVENUE (0+) TO NON-REVENUE (DIAL-AROUND) CALLING.**

- **IT IS NOT ECONOMICAL TO DEPLOY DIFFERENT PUBLIC TELEPHONES SPECIFIC TO COIN AND NON-COIN CALLING.**

- **SCOPING PUBLIC TELEPHONE EQUIPMENT TO CORRESPOND WITH CALL PAYMENT PATTERNS DOES NOT AFFECT INDIVIDUAL STATION USAGE.**

- **THE LEAST EXPENSIVE CALL THAT CAN BE PLACED FROM A PUBLIC TELEPHONE IS A LOCAL COIN CALL.**

**TCG, 09/23/97**

# TELEPORT COMMUNICATIONS GROUP INC.

## Economic Justification for FCC Per Call Dial Around Compensation

**TCG PAYPHONE**

| REVENUE | | A | B | C | D | E |
|---|---|---|---|---|---|---|
| (1) | Coin Revenue | 114.69 | 114.69 | 114.69 | 114.69 | 114.69 |
| (2) | Non-Coin Revenue | 80.00 | 80.00 | 80.00 | 80.00 | 80.00 |
| (3) | Dial Around Comp. | 0.00 | 6.00 | 32.75 | 45.85 | 54.85 |
| | **Total Revenue** | **194.69** | **200.69** | **227.44** | **240.54** | **249.54** |
| | | | | | | |
| **EXPENSES** | | | | | | |
| (4) | Line Charge | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 |
| (5) | IXC/OSP Fees | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 |
| (6) | Commissions | 38.94 | 40.14 | 45.49 | 48.11 | 49.91 |
| (7) | Coin Collection | 20.00 | 20.00 | 20.00 | 20.00 | 20.00 |
| (8) | Phone Maintenance | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 |
| | **Total Expenses** | **183.94** | **185.14** | **190.49** | **193.11** | **194.91** |
| | | | | | | |
| (9) | **EBITDA** | **10.75** | **15.55** | **36.95** | **47.43** | **54.63** |
| (10) | Depreciation | 24.17 | 24.17 | 24.17 | 24.17 | 24.17 |
| (11) | **EBIT** | **(13.42)** | **(8.62)** | **12.78** | **23.26** | **30.46** |
| (12) | Taxes @ 40% | (5.37) | (3.45) | 5.11 | 9.31 | 12.19 |
| (13) | **Net Income** | **(8.05)** | **(5.17)** | **7.67** | **13.96** | **18.28** |
| | | | | | | |
| (14) | Capital Cost | 1,950 | 1,950 | 1,950 | 1,950 | 1,950 |
| | | | | | | |
| (15) | **Return on Investment (ROI)** | **-4.95%** | **-3.18%** | **4.72%** | **8.59%** | **11.25%** |
| | | | | | | |
| (16) | **DAC Rate Per Call** | **0.00** | **0.05** | **0.25** | **0.35** | **0.42** |

# TELEPORT COMMUNICATIONS GROUP INC.

## Economic Justification for FCC Per Call Dial Around Compensation

| | Decsription | Source | Explanation/Comment |
|---|---|---|---|
| (1) | Coin Revenue | HBW & Co. Page 35, TCG | Assumes 500 calls (Per HBW & Co) at .25 per call less 8.25% Sales Tax ( Actual NY Rates) |
| (2) | Non-Coin Revenue | HBW & Co. Page 35 | Assumes 20 calls @ 4.00 per call. |
| (3) | Dial Around Comp. | FCC | Based on FCC average of 131 Dial Around type calls per phone per month times Line 16 |
| (4) | Line Charge | HBW & Co. Page 35 | $40 per month plus 6.7 cents per call (500+20) |
| (5) | IXC/OSP Fees | HBW & Co. Page 35 | Half of non coin revenue |
| (6) | Commissions | HBW & Co. Page 35 | 20% of Gross Revenue |
| (7) | Coin Collection | TCG | $20 Per phone per month for coin collection based on bids to TCG for such services |
| (8) | Phone Maintenance | TCG | $10 Per phone per month for maintenance of the phone based on bids to TCG for such services. |
| (9) | EBITDA | N/A | EBITDA = Earnings before Interest Taxes Depreciation & Amortization |
| (10) | Depreciation | HBW & Co. Page 34 | $1,950 - $500 salvage value = $1,450 /5 years = 290 per phone /12 months = 24.17 per month. |
| (11) | EBIT | N/A | EBIT = Earnings before Interest Taxes |
| (12) | Taxes @ 40% | TCG | Assumes Federal & State corporate taxes. |
| (13) | Net Income | HBW & Co. Page 35 | Net Income |
| (14) | Capital Cost | HBW & Co. Page 34 | Cost of Phone, enclosure & installation |
| (15) | Return on Investment (ROI) | N/A | ROI = Net income annualized (-8.05 * 12) / capital cost ($1,950) |
| (16) | DAC Rate Per Call | N/A | Assumed Rate per call |

**NOTES:** HBW Report = Hoak Breedlove Wesneski & Co. - Update on the independent Payphone Industry John Bain, CFA & William Power - August 1, 1997

HOAK BREEDLOVE WESNESKI & CO.

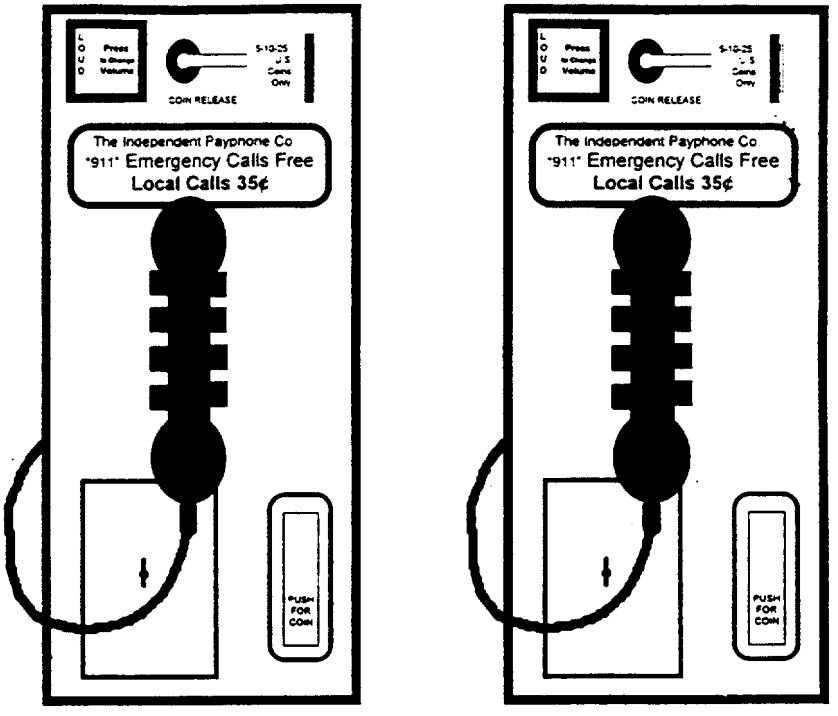
# EQUITY RESEARCH

H B W



# Update on the Independent Payphone Industry

## With Notes on the Appellate Court Decision, Comments on The Publicly Traded Companies, And Updated LEC Payphone Statistics




**John S. Bain, CFA**
**William V. Power**

**August 1, 1997**

A MEMBER OF NASD AND SIPC 13355 NOEL ROAD SUITE 1650 DALLAS TEXAS 75240 TEL 972 960 4846 FAX 972 960 4823

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**Analyst's Note**

The telecommunications industry is replete with its own specialized terminology, and a nearly infinite set of acronyms. In this report we assume that the readers are familiar with the more common telecom jargon so that they will know, for example, the difference between an InterLATA and an IntraLATA call. And that they will know what LATA itself stands for, and why. However, for readers who aren't familiar with the industry, a glossary of terms is included in Appendix II, with relatively detailed explanations of what these terms mean. If we have missed any, let us know.

This report is an update and revision of a similar overview industry publication dated November 20, 1996. Since then, we have published stand-alone research reports on three of the four major publicly-traded IPPs: Davel Communications Group (DAVL - 17 3/4), Communications Central, Inc. (CCIX - 9 1/4, and Peoples Telephone Company (PHO - 3 1/16). Also available from HBW are published reports on Intellicall, Inc. (ICL - 4 1/16), a major manufacturer of intelligent payphones, an update on the appeals decision related to the FCC Payphone Order, and a report titled, "An Investor's Overview of the Inmate Telecommunications Industry", dated May 13, 1997. This report includes a new section on the implications of the Appellate Court decision in the Payphone appeals, and summary descriptions of four publicly-traded payphone companies. Copies of earlier reports are available on request.

- John Bain
William Power

# Update on the Independent Payphone Providers

## Summary and Investment Thesis

Several recent developments appear likely to improve both the short-term and long-term operating outlook for those companies providing public access, or "payphone" service in competition with the traditional local telephone companies[1]. Chief among these are provisions of the Telecommunications Act of 1996, and administrative orders issued by the Federal Communications Commission in response to the Act.

In addition, on July 1, 1997, the United States Court of Appeals for the District of Columbia Circuit issued its decision in a consolidated case addressing 20 separate appeals of portions of the September 20, 1996 FCC Payphone Order. Our analysis of that decision was published in a report dated July 2, 1997, and is summarized within.

The details of the Telecommunications Act and the FCC orders are lengthy and complex, and the implications of the Appellate Court decision unclear. But two major features stand out. The first is a mandate to provide compensation to the payphone owners for certain types of "800" and other calls for which they previously received no revenue at all. Although the *amount* of such compensation and the mechanism by which it is to be paid have been remanded to the FCC by the Court, the basic principle that the IPPs *will be paid* is well established. The second is deregulation of the basic local coin rate as of October 7, 1997, which has been firmly sustained by the Appellate Court. This will enable payphone service providers to increase the basic local coin rate (or decrease it, for that matter) as market conditions require.

The Payphone Order produced an immediate improvement in revenue generation per payphone, beginning in the fourth calendar quarter of 1996, though results were still somewhat mitigated by the impact of dial-around calls. Further increases are expected to result from future changes in the way compensation is calculated and from increases in the local coin rate. These expectations lead to the conclusion that the profitability of all the publicly-traded payphone companies will improve, including those that have experienced losses in the recent past. A positive trend in the prices of the stocks of these companies is expected to result.

One of the publicly traded payphone companies -- Davel Communications Group -- has demonstrated that it has been possible to manage their business profitably even under the adverse compensation and other conditions that have characterized the industry in recent years.

In addition to legislative and FCC actions, developments internal to several of the companies themselves lead one to believe that improved financial performance is on the horizon. Two of the major players -- Peoples Telephone and Communications Central -- have new management at the top, and both have undertaken restructuring activities that should strengthen their financial results in the future. One of the public companies -- PhoneTel Technologies, Inc., completed a public offering of common stock, in December of 1996, and in March, announced the acquisition of Communications Central Inc., contingent on meeting the financing requirements. On balance, the event of potentially greatest long-term importance has been the recognition at the federal level that the IPPs are an important part of the emerging competition in the local exchange portion of the industry, and are entitled to the sort of "level playing field" that has emerged over time in the equipment and long-distance portions of the industry.

## Investment Thesis

The case for consideration of the Independent Payphone Provider stocks at this time rests on the following considerations.

- There is a significant and enduring demand for public payphone service. (i.e. it is basically a sound, recurring revenue business.)
- In the recent past, a significant portion of the long-distance traffic generated by payphones

[1] In this report we refer to such companies as "Independent Payphone Providers," or "IPPs", in the sense that they are "independent" from the local telephone companies. Other terms used include "COCOT", and "PSP", as explained in the body of this report, or the Glossary of Terms in Appendix III.

has been so-called "dial around" calling, for which the IPPs received relatively little or no compensation.

- Passage of the Telecommunications Act of 1996, followed by release of new payphone compensation rules by the FCC in response to the Act, will significantly improve both the financial and regulatory factors affecting the IPPs.

- Much of the poor stock-market performance of several of the publicly-traded IPPs has resulted from over-expansion into other lines of business and from overpaying for acquisitions of payphone routes. However, the management teams at the companies that have experienced difficulties are in the process of correcting their operations and returning the companies to profitability and growth.

- These developments, combined with the depressed level of investor interest, minimal analyst coverage, and low market valuations, creates an opportunity for investors who agree with the above points and have the patience to see them develop. For such investors, investment in stocks of the publicly-traded PSPs and related issues should be attractive.

The report that follows reviews the basics of the industry, including recent legislative, regulatory, and judicial activities that affect the investment outlook.

## Introduction: The Emergence of Competition

Although it seems incredible today, it was not that long ago -- certainly within the memory of many of the readers of this report -- that the provision of telephone service in the United States was virtually a total monopoly in each market.[2] "The Phone Company" ("TPC[3]") was the cradle-to-grave provider of en service and equipment. So-called "tariffs" -- w when filed by the telephone company with regulatory authorities have the force of law -- r customers to even attach their own telephone equip to the phone company's lines. Everything -- mo answering machines, facsimiles, telephones themse - was owned by the local telephone company available only on lease. There was only one local p company in each market, and that company provided the billing for the only interstate long-dis carrier, AT&T.[4] As far as most customers concerned, "the phone company" was the si monolithic provider of service.[5]

For a variety of reasons, public policy in the second of the century has increasingly turned towards ope the telephone industry monopoly to competition. most cases, this has been widely viewed as benef the general populace in one way or another. change in policy led first to the opening of the m for end-user-equipment, collectively known as Custo Premises Equipment, or "CPE", which took a coupl decades[6]. Next (or somewhat concurren competition came to the "long-distance" portion of

[2] For most business and residential service, it was *really* a total monopoly. The reason we use the term "virtually" to describe even the days before the "Above 890" decision is that there were always a few exceptions, such as the AUTOVON military network, private police and other radio systems, and other outliers. But for practical purposes, provision of telephone service was a monopoly of either private business (as in the United States) or the government (in most of the rest of the world).

[3] Readers who have not seen the film "The President's Ana starring James Coburn and Godfrey Cambridge, are encouraged so.

[4] How this mess developed is an interesting story in itself. Rea will be happy to learn, however, that it is much too long to be repe here, and not particularly relevant to this report.

[5] It should be noted that due to the unusual political structure c United States and the fact that telephony developed as a priv owned, for-profit industry, there always have been a large numb local exchange telephone companies. At the dawn of the compe era, there were approximately 2,500 individual telephone compani existence. Of these, a mere 23 were partially or wholly owne AT&T as components of the "Bell System". But those 23 contr approximately 80% of the local exchange market. And most o rest were smaller rural markets that, again for a variety of reas AT&T probably didn't want in the first place. Subsequent mergers acquisitions have reduced the number somewhat, but even t there are approximately 1,100 local exchange telephone companie service in the United States.

[6] Known in the industry as Customer Premises Equipment, or "C every gadget that could be usefully attached to the telephone net was formerly owned and leased by the local telephone company addition to ordinary telephone handsets, CPE included answe machines, autodialers, PBXs, modems, digital data sets, and dev to communicate with the deaf. In terms of timing, the first real crac the CPE monopoly from a legal standpoint came in what is referred to as the "CarterPhone Decision" in 1967, but this segmer the industry was not fully opened up until January 1, 1983, a spa 16 years.

industry, led by the fanatical efforts of MCI to enter the market in competition with AT&T[7].

On January 1, 1984, the remainder of the telephone equipment business -- equipment sold into the infrastructure of the Bell Operating Companies -- was effectively opened to competition with the divestiture of the Regional Holding Companies by AT&T[8]. Interestingly, it took AT&T more than a decade -- until this very year, in fact -- to recognize that continued ownership of the telephone equipment business was not that all attractive, leading to the "second divestiture," the spin-off of the stock of "Lucent Technologies."

Competition is now expanding into the last portion of the industry that can still be considered to be operating under the old monopoly structure, the local exchange portion of the industry. Beginning with a series of administrative proceedings , the most recent of which is called the "Third Computer Inquiry, " the Federal Communications Commission has pursued a course of re- or de-regulation aimed at opening up the business of the LECs to competitive entry. Most recently, the Telecommunications Act of 1996, signed into law by President Clinton on February 8, 1996, sets forth a program to both open up the local exchange industry to competition, and to allow the local exchange telephone companies to expand into portions of the industry from which they were formerly barred.

Included in this broad pro-competitive program was a mandate that the Federal Communications Commission establish rules to insure that the public pay telephone market is opened to competition on an equitable basis. The FCC has responded with an order, released September 20, 1996, that will improve certain of the operating and financial factors that have tended to retard the development of the competitive payphone industry in the past, with potentially important investment implications.

The following sections first discuss the basics of the pay telephone business, and then review the regulatory and legislative evolution of the industry to its current state. We then briefly describe why we believe that the recent legislative and administrative actions have improved the investment outlook for the companies involved in the provision of competitive payphone services.

## Basics of Payphone Service

It should be noted at the outset that, in the broad scope of the telecommunications industry, the provision of payphone service is not a particularly big deal for the local telephone companies. The data in Appendix IV, summarized here in Figure 1, show that less than 1% of LEC access lines are currently public access lines. And even though payphones tend to generate greater revenues than ordinary residential access lines, the overall business is a relatively small portion of the LEC total[9].

The basic function of most payphones is to enable members of the general public to place (or, rarely, receive) telephone calls and other communications[10] when they are away from their home and/or office. For most of the history of the telephone industry, the local telephone companies have provided "public access" telephones as a secondary business to their primary residential/business service. Public payphone service

[7] With the benefit of hindsight, one can only wonder whether the original founders of MCI - Goeken, McGowen, Roberts, Wright, and many others - were so brilliant and insightful that they realized that after a mere 20 years of losing money, industry conditions would change to the extent that competition could eventually succeed. Or were they so naive that they did not recognize the tremendous artificial regulatory cost burden carried by AT&T's end-user rates, and really thought that microwave technology (the company's original name was "Microwave Communications, Incorporated") gave them some sort of cost advantage. In any event, MCI started its first (private line) service in 1968. It was not until the establishment of "access charges" concurrent with the 1984 Bell System Breakup, that a more-or-less level playing field was created, also a span of 16 years (see fn. 6 above).

[8] In preparation for the divestiture, the twenty-one wholly owned Bell Operating Companies were reorganized as subsidiaries of the familiar seven "Regional Holding Companies." ("RHCs") Stock in each of the seven RHCs was then spun off to AT&T shareholders on a 1-for-10 basis. (Subsequent splits have greatly increased the number of RHC shares outstanding.) Recently, two of the RHCs - Pacific Telesis Corporation and SBC Communications have merged, and Bell Atlantic and NYNEX have plans to do so. Additionally, on an ironic time reversal, AT&T and SBC are believed to be in merger talks as well.

[9] This is as good a place as any to point out something about LEC revenue generation from payphones. Recalling that the BOCs, unlike IPPs, are not permitted to sell or generate revenue from interLATA traffic itself, one can note that LEC-owned payphones generate local coin calling revenue, IntraLATA Toll Revenue (some coin, mostly non-coin), and InterLATA revenue through the access charge mechanism. LECs generate revenue from IPP-owned phones through the local monthly COCOT tariff rate, a per minute or flat per-call rate applied to local coin calls, and (again) the interstate access charge on calls forwarded by the IPP to its IXC. In addition, the LECs may indirectly generate revenue from billing and collection services provided for the IPPs.

[10] See, more awkward jargon, necessary in this case to include the use of payphones for facsimile transmission/reception, data communications (via modem), and access to paging, voice mail, "911" Emergency Service, and other services. But for purposes of this report, let's agree that all these potential uses of a payphone are included under the term "calls."

differs from the mainstream offerings of the LECs in a number of technical and economic factors.

## Economic Factors

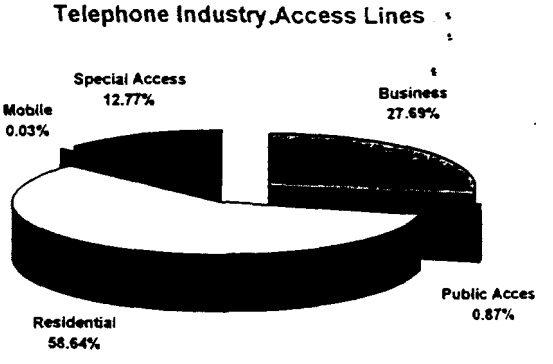
In contrast with residential and business service offerings, payphones normally do not generate revenues for the LECs from recurring "basic monthly" charges.[11] In fact, the modern practice, brought about largely by the emergence of competition, is for the payphone operator to actually pay the location owner a fee, the opposite of "normal" residential or business phone service.

Offsetting this lack of a basic recurring monthly revenue stream is the fact that payphone pricing is much more "usage sensitive." For reasons that are again largely historical, LECs traditionally offered "flat rate" pricing within a given geographic area, originally known as the "local exchange area," now known by a variety of other names.[12] Coin phone service, in contrast, required a per-call coin deposit for local calling. In addition, to the extent that long-distance calls were made, some sort of operator intervention was required, to either inform the caller how much to deposit, or to gather the necessary billing information. Over time, the labor intensive nature of these "Operator Service" calls justified the imposition of ever-higher "surcharges" on operator-handled calls, as opposed to what are viewed as "normal" direct-dialed long distance rates[13]. Today, of course, the automated "bong" tone system of calling-card and other billing software systems have eliminated much of the operator labor from toll calling. The surcharges, of course, remain.

From a service viewpoint, it should be noted that in most cases payphones do not carry any sort of address or directory listing, and many (particularly the AT&T-type "coinless" payphones) do not even display their own telephone numbers. Some do not even accept incoming calls[14].

Telephone companies and regulators alike have viewed payphone service as a minor part of the business, more in the nature of a public service than a real profit-making portion of the industry. From a business viewpoint, it can be noted that public access lines (i.e. payphone lines) account for less than 1% of all telephone access lines in service (see accompanying graph).

**Figure 1**




Source: Preliminary Statistics of Communications Common Carriers, Federal Communications Commission, 1996.

Although the evidence supporting the contention is fairly weak, certain advocacy groups view payphones as

[11] The distinction between basic business and residential service is more economic than technical. In general, for a plain-vanilla POTS line, the single-line "business" tariff will impose a fixed monthly charge two or three times as great as an identical line designated for "residential" service. There are lots of historical reasons behind this obviously discriminatory rate structure, some of which even make sense, but they are not directly relevant to the payphone industry.

[12] At the risk of oversimplifying the situation, note that in the very early days of telephony, recording, accounting for, and billing for individual local calls was prohibitively labor-intensive and expensive, so the practice of offering what amounts to unlimited local calling minutes of use for a flat fee was more the rule than the exception. "Toll," or "Long-Distance" calling, on the other hand, has generally been priced strictly on a per-minute-of-use basis. (There are exceptions to each case.) Payphone service was a bit of an anomaly, in that callers generally paid a flat fee for each local call, but the call could be of unlimited duration. For most of the first half of the century, the rate was five cents, giving rise to the saying "it's your nickel" to callers.

[13] Actually, the reverse is true. In typical Luddite tradition, the U.S. public was generally opposed to the introduction of "DDD", or Direct Distance Dialing, preferring to use the "warm fuzzy" services of a live operator. To encourage usage of DDD, the industry offered a discount from then-"normal" long distance rates for operator-handled calls. As DDD has expanded to encompass the great bulk of calling, the DDD rates have become viewed as the "normal" prices, with the operator-handled calls carrying a "surcharge."

[14] Most jurisdictions offer a hybrid service designated "semipublic." "Semi-pub" coin phones, as they are known, do carry a directory listing, typically of a service station or similar location with limited need for outgoing business service. Customers can, of course make calls to the semi-public phone from within the local calling area for "free." Depending on the nature of the tariff, the location owner may pay a reduced fee to have the phone on his premises, perhaps offset by a payback of a portion of the coin revenue generated. But, of course the location owner himself has to deposit coins to make outgoing calls. Today, with most locations hotly contested on a commission basis, semipublic service is of little importance.

the service of last resort for disadvantaged groups, including the poor and homeless, who require the presence of payphones for provision of emergency fire, police, medical, and similar services. Indeed, a key provision of the recent FCC payphone order discussed below is that Payphone Service Providers are specifically *not* entitled to compensation for calls to "911" emergency service, or for calls to "telephone relay" services for the hearing impaired.

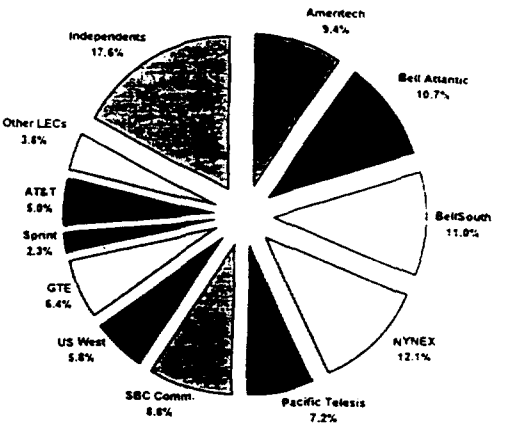
Prior to the emergence of competition in the payphone industry, the LECs generally claimed that their payphones were unprofitable, partly because the basic local calling rate was held to as low a level as possible. Today, local coin rates appear to have little relationship to either costs or market demand, varying from ten or fifteen cents in some jurisdictions to as high as fifty cents in others. The most common rate -- twenty-five cents for local calls of unlimited duration -- has in most cases remained unchanged through several decades of inflation.

## The Payphone "Industry"

There is in fact no separate, clearly defined "industry" providing payphone service. Payphones are found throughout the nation, in population centers and in rural areas, on city streets, and in private office buildings. The vast majority of the roughly two million payphones in service today are owned and operated by the 1100-plus local exchange telephone companies, or by AT&T, which owns and operates "coinless" payphones in locations throughout the market. Most of the telephone companies are small, and it is estimated that only about 25 telephone companies have more than two thousand payphones in operation today.

The great majority of payphones are accounted for by ten major operators: the seven Regional Holding Companies or "Baby Bells," GTE, Sprint Corporation, and AT&T. Together these ten account for an estimated 79% of the approximately 2.0 million phones in service today.

**Figure 2: Payphone Ownership**[15]




Because a payphone is an electromechanical gadget that is attached to the end-user side of a pair of telephone wires, it can be viewed as simply one version of Customer Premises Equipment. But the political and regulatory aspects are quite different. Officially, regulated payphones operated by the Local Exchange Carriers are considered to be part of "network equipment," itself a somewhat imprecise term. Or, because of its obvious value to the general public for emergency police, fire, "911" and other services, perhaps a payphone should be viewed as something of a public service. But none of the analogies are entirely correct.

**Table 1: Payphone Ownership**

| | Number of Payphones | Percent of Total |
|---|---|---|
| Ameritech | 186,534 | 9.37% |
| Bell Atlantic | 212,616 | 10.68% |
| BellSouth | 218,346 | 10.97% |
| NYNEX | 240,514 | 12.09% |
| Pacific Telesis | 142,845 | 7.18% |
| SBC Communications | 175,376 | 8.81% |
| US West | 115,473 | 5.80% |
| GTE | 127,420 | 6.40% |
| Sprint | 44,966 | 2.26% |
| AT&T | 100,000 | 5.03% |
| Other LECs | 75,938 | 3.82% |
| Independents | 350,000 | 17.59% |
| **Total** | **1,990,028** | **100.00%** |

Source: "Statistics of Telecommunications Common Carriers," as of December 31, 1996, Federal Communications Commission, Table 2.10.

[15] Source: Bell Regionals, GTE, Sprint: *Preliminary Statistics of Communications Common Carriers*, December 1996, table 2.10. AT&T estimated by HBW research. Independents from FCC *Notice of Proposed Rulemaking* in CC Docket 96-128.

From the end-user's viewpoint, public payphone service seems pretty simple: You pick up the handset, get dial tone, put in a quarter, dial, talk, and hang up when you are done. Except for the quarter, it is not all that different from ordinary residential or business usage. Or maybe you want to make a credit card call of some kind, which can be a bit more complicated, requiring you to input a bunch of calling-card digits in addition to the number you want to reach. But it basically seems pretty simple, and from a marketing point of view that is a good thing, since ease of use is necessary to maximize revenue from the phone. (Anyone who has tried to use public payphones in a European country will know how baffling they can be.)

But from the payphone operator's viewpoint, both the technical and regulatory aspects of operation are much more complex than the provision of ordinary home or business service. For one thing, there is the matter of the coins themselves. Virtually all local calls are sent-paid coin calls. In a way this is great, because calls paid for with coins have no accounts receivable or uncollectibles associated with them[16]. On the other hand, a concentration of cash -- payphones can hold up to $200 in coins -- does tend to attract thieves and vandals, with subsequent damage to the phone. Also, just handling the darn things can be a major chore; a million dollars in quarters can get pretty heavy[17].

More importantly, a payphone operator *must* collect coins promptly from his instruments, because if the coin box is full, the coins will back up into the coin mechanism, causing it to jam. This renders the phone inoperable, at least for further coin calls, with two serious consequences. The first is that the phone cannot accept any additional coin revenue during the period that the mechanism is jammed. The second is that an inoperable phone will generate a lot more vandalism and damage than one that is working. In fact, although there is little hard evidence to back this up, most route operators believe that the great majority of damage occurs when users either lose their money to an uncompleted call or find the phone to be out of order.

This mandate to collect coins promptly tends to incre the number of service calls to phones that otherwise n be working perfectly, with associated higher costs. ( the other hand, it is hard to imagine any busin complaining about having to collect money frequently.)

Finally, accepting coins also implies some sort of obligation to make cash refunds where warranted. In t good old days of LEC monopoly, operators wou unhesitatingly offer to mail a quarter to a caller w claimed to have "lost" money in a payphone. In sor cases they would even go so far as to offer to mai change for a caller who had only two quarters to depo for a thirty-five cent call. In an era when a posta stamp costs more than the call, payphone operators a understandably reluctant to even let it be known th they will make cash refunds if asked, and they certain don't go out of their way to advertise the policy[18].

## "Smart" Payphones

For a variety of reasons, development of the IP industry has depended on the development of the sc called "smart" phone. Because the LECs initiall refused to sell ordinary coin-line services to what the called the "COCOTs," IPPs were unable to handl anything other than local basic-rate coin calls. In orde to handle even the simplest sent-paid, or "1+" coin tol calls, independent operators had to hand the call off t the local LEC or the IXC to which the COCOT line wa presubscribed, which generally meant AT&T.

However, led by Intellicall, Inc., and other equipmen manufacturers, the industry quickly developed the so-called "Smart" payphone, that had the ability to store and retrieve a "1+" rate table, so that the phone itself could determine the amount to charge for at least "1+" coin calls. The IPP still had to pay the AT&T long-distance bill, of course, so they had to charge a premium, but at least a portion of the toll market could be tapped[19]. Today, of course, changing regulation

[16] In earlier times, there was a problem with counterfeit coins. But, thanks to the policies of our national leaders, it has now apparently become so expensive to create counterfeit coins that they cost more than their own face value. It is literally cheaper to use a real coin than to create a fake one that can elude the various fraud-detection mechanisms in today's payphones, so the problem is much reduced today.

[17] Approximately 25 tons.

[18] It can be suggested that an additional piece of evidence as to how ridiculously underpriced the local coin rate is, lies in the fact that operators report relatively few requests for such refunds.

[19] To clarify the situation a bit, note that in this kind of call the IPP was charged pretty much the same AT&T price that would apply to any other DDD toll call. The LEC made its money on the interstate (or intrastate interLATA) access charge, plus, of course the monthly charges to the IPP. Under these conditions, the only way the IPPs could generate *any* margin on such a call was to charge a price higher

enables the smart phones to do a lot more, but the point is that the development of the smart phone was essential to even enable the IPPs to get started in the toll portion of the business.

Smart payphones of course tend to be relatively expensive, in the range of $1,000 plus installation, and require significant maintenance. To those who are accustomed to using a home or business telephone set for years or decades without problems, maintenance may not appear to be a major factor. But coin phones have complex coin mechanisms, and "smart" phones contain significant electronic componentry. In addition, unlike LEC-provided "dumb" phones, most IPP smart phones require commercial electric power to run the internal electronics[20]. In many applications, particularly those where commercial power is simply not available, the major manufacturers offer "line-powered" models, that are capable of working off the electrical power supplied over the LEC access line. Line powered phones tend to be more expensive, and require draconian power-conserving circuitry, which receives very little power from the telephone company central office when the phone is on-hook.

Finally, periodic cleaning of the payphone and its enclosure is necessary to maximize usage. Most users probably feel no personal responsibility for keeping payphones clean and neat, so they do show signs of use relatively quickly. In "upscale" locations such as airports, hotels, or office buildings, payphones may receive more considerate treatment, but even there they tend to accumulate cigarette butts, gum wrappers, and discarded note paper over time. The outdoor locations of many phones also contributes to an accumulation of grime. Finally, although the topic is not often discussed, many users or potential users of payphones probably feel some degree of concern that the instruments are not entirely sanitary. After all, unknown legions of previous users have been in intimate contact with the handset and keypad, possibly sneezing and coughing all over them in the process[21]. Again, the hard evidence is scant, but it is universally believed in the industry that a clean phone will generate more revenue.

The point of all this is that there will always be a fair amount of labor involved in the management of a payphone route, certainly far beyond that associated with ordinary residential or business telephones.

## Revenue Generation

From an economic viewpoint, revenues from any payphone can be classified, at the risk of some oversimplification, as "coin" or "non-coin". In round numbers, coin and non-coin revenues will tend to be approximately equal for the average payphone, although the proportions will vary radically from location to location. A telephone at, say, a supermarket or library will tend to generate almost entirely local calls, since not too many people travel far from home to buy groceries or borrow books. One at an airport will be used much more for interexchange non-coin calling, since a large proportion of the potential users are a long way from their homes or offices[22].

Although the *revenues* from a typical coin phone may be more or less evenly split between local and toll, the *number* of calls will be dominated by local calls in most cases, as is true of most telecommunication services.[23] There will, of course be some sent-paid "toll" calls from payphones, and the IPP industry typically handles them through the capabilities of the "smart" payphones used.

If, for example, a caller dials "1" plus an area code and number, the payphone itself knows that the call will be a sent-paid (coin) toll call. Each payphone has enough memory to store a "rate table" that can relate the number dialed to the correct mileage band for the call. The same table also contains rates for that mileage band, and

than AT&T's. And of course the telephone companies labeled this as "overcharging."

[20] Perhaps not as much of a disadvantage vis-à-vis the LECs as it may appear, since most payphone locations do have electric power readily available. Many enclosures ("phone booths") are lighted by AC power, both for security at night and because it attracts the attention of potential users during hours of darkness. As an aside, it may be interesting to know that, virtually without exception, AC-powered smart phones work off the location owner's power system, with no separate meter. In addition, the major manufacturers offer "line-powered" models, which are capable of operating from the power supplied by the telephone company over the access line.

[21] There actually was some sort of a study of the public health implications of public payphones some time in the past. We have been unable to locate the citation for this report, but the conclusion, obviously, was that there is no identifiable health risk, at least not within the United States.

[22] In fact, in most jurisdictions, it is precisely airports, hotels, and other traveler-oriented locations where most of the "coinless" payphones such as the AT&T "Payphone 2000" instruments are located.

[23] Most traffic on the PSTN tends to be local in nature. The standard estimate is that 90% of all completed calls never leave the local service area, a statistic that also appears to apply to cellular, paging, facsimile, and other types of calls.

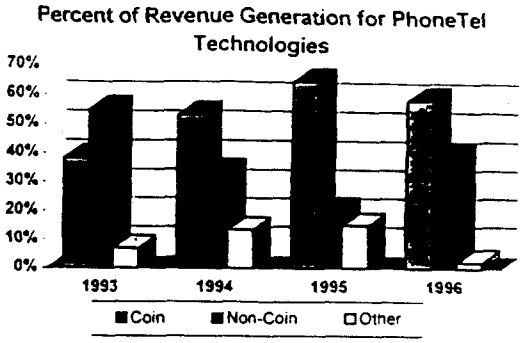
(being a computer, after all), the phone knows the time of day to determine if any off-peak or other special rates apply. When the dialing is completed, the phone itself generates a synthetic, usually funny-sounding, voice message to "please deposit such-and-so for the first X minutes". If the correct amount is deposited, the phone then dials the number over whatever long-distance carrier is appropriate.[24] In this type of sent-paid toll call, the IPP collects all the coin revenue, but will receive a bill itself from the IXC for the toll call.

Some IPPs have attempted to increase the proportion of coin revenues by offering services that permit long-distance calling "anywhere in the U.S." (or some similar offer) for a flat rate of twenty-five cents a minute, with (usually) a minimum of four minutes. By eliminating the billing, collection, and fraud aspects of non-coin calling, it is possible for the IPP to clear a profit on such offerings[25]. But most long-distance callers expect to be able to make a non-coin call from a payphone, by use of a calling or credit call, collect or third number billing, or through use of an "800" service.[26]

## Non-Coin Revenues, Billing, Collection, OSPs, and all that

Because non-coin calls tend to generate much higher per-call revenues than sent-paid coin calls, they are an important source of revenue, and it is in this area that the major regulatory and competitive battles have been fought.

Figure 3




Source: Form SB-2 Registration Statement of PhoneTel Technologies, Inc dated October 9, 1996, page 33.

Non-coin calls can be of several types, most commonly calling card, credit card, collect, or third-party billing (as when a payphone user wishes to bill a call to his home or office phone). Realization of revenues from non-coin traffic requires the payphone operator to have some way to record (capture), process, and bill the calling record and billing information, and to collect the amounts due.

It may seem that billing for non-coin calls should be a simple matter, but as usual it is not. Normal credit card calling (Visa, Master Card, etc.) is somewhat complex: if only because there is no "hard" copy such as the signed "credit slip" retained by most retail sales organizations. Other methods of billing, such as telephone credit card require some sort of service and billing agreements with the issuers of such cards. Some - such as AT&T - have "proprietary" calling cards that they refuse to share with other carriers. In addition, users of telephone calling cards expect to be billed for the call on their regular home or business phone bill. Because payphone users can literally generate calls to be billed to numbers anywhere in the country, billing agreements with a large number of the LECs and other calling card issuers are required.

Collect calls present a similar problem. A collect call from a payphone can literally be made to any telephone in the country. Called parties that agree to accept such charges will likewise expect to be billed on their regular phone bill.

In the case of ordinary home or business phone service, a single bill can contain a large number of calls, and a significant total revenue number. By contrast, billing for non-coin calls from a payphone is likely to consist of

[24] In some cases such as IntraLATA calls in some jurisdictions, the IPP has no choice but to hand off the call to the LEC, in which case the IPP itself will be billed by the LEC for the call, at whatever rates (usually high) the LEC has been able to get through the PUC. In others, such as interstate calls, the payphone will direct the phone to the IPPs presubscribed IXC who (presumably) charges the payphone the most favorable rate available.

[25] In fact, to the extent the PSP can contract with a particular IXC for a favorable rate, margins can be pretty good, with the long-distance portion of the call available for something on the order of ten cents a minute. The LEC will in most cases still get a couple of cents a minute for the sent-paid call (as is also the case for a local coin call), and possibly a per-call fee on top of that. But overall, the service can be quite profitable

[26] Many organizations routinely subscribe to "800" service for the express purpose of enabling their own traveling employees to call back to their office at an attractive rate.

a large number of small bills to widely-separated geographical points.

The traditional telephone industry has developed a complex internal system to process and clear such bills, but it has largely been unavailable to independent payphone providers either because the telephone companies did not offer them such services, or because the prices they charged for relatively small bills was prohibitive.[27]

In addition, the processing of non-coin calls is relatively complex. In addition to completing the call, the payphone operator needs some way to collect the billing information, to "rate" the call (i.e. decide how much to charge for it), and to somehow get a bill in the hands of the paying party that they are likely to pay.

The most common procedure has been for the payphone operator to routinely forward non-coin calls to a so-called "Operator Service Provider," or "OSP." The telephone companies themselves are of course major OSPs in every market, but a number of independent OSPs have sprung up to serve the IPPs and other non-LEC service providers.

In an attempt to simplify the concept, we suggest that one way to view an OSP is as just another form of telemarketing. But instead of taking incoming calls from people who want to buy the Veg-O-Matic or a gold necklace, the OSP is selling them a phone call. Here is how OSP service generally works:

When a caller dials "O," the smart phone recognizes that the caller wants to make some sort of "Operated Handled" call. The phone itself then dials the telephone number (typically an "800" or other discount service), and the caller is connected to the OSP provider, who may be halfway across the country. If the caller has made an "O+" call, they have dialed a (typically) ten-digit telephone number, and the payphone itself connects the caller to the familiar "bong" tone from the OSP. The caller then inputs his calling card or other number, and the OSP (a) "validates" the calling card or other billing information, (b) starts the timing of the call, (c) records the billing information, and (d) completes the call by switching it to the IXC they use (such as MCI, AT&T, etc.) When the call is completed, the OSP's automated equipment notes the completion, records the end of the call, and compiles the billing information.

In the case of an "O-" call, which means that the caller just dials "Operator", the caller will be connected to a real live person at the OSP's location. That "operator," who will look pretty much like one of the "operators" at Home Shopping Network, will see a screen full of information regarding the location of the payphone originating the call, the called number, etc. The operator can then tell the caller how much money to deposit for the initiation of the call (a lot) or can take down the billing information, or can reach the called party to obtain acceptance of collect charges, etc. The operator types the information into the computer, and the call proceeds as in the case of an "O+" call.

Payphone operators have developed a number of ways to process bills for non-coin calls. One is to sell the receivables outright to a billing company, at a discount adequate to cover processing costs, uncollectible and unbillable amounts[28], and fees charged by the LECs. Another is to strike direct billing agreements with the LECs themselves for those calls that the individual LECs can bill (i.e. to their own subscribers). The latter can be economical for LECs that serve areas where the payphone provider has a concentration of phones. For example, it might make sense for a payphone route operator in Texas to strike a direct-billing agreement with Southwestern Bell, since a lot of non-coin toll calls generated will be billed to calling card, third party, or collect numbers in Texas, or one of the four surrounding states also served by Southwestern Bell. However, striking an agreement with New England Telephone may make less sense, due to the relatively low proportion of calls billed to numbers in that jurisdiction.

## "Store-and-Forward" Technology

An additional weapon in the competitor's arsenal was the development of "store and forward" capability

[27] Billing practices tend to vary from company to company. Generally, however, the LECs charge an initial fee to establish a billing agreement, plus a fee for each bill and for each record (call) processed. For small bills, this can become a prohibitively high portion of the revenue.

[28] A distinction is usually made between *unbillable* and *uncollectible* amounts. Unbillable refers to calls for which it is literally impossible to render a bill because, for example, the billing information is incorrect, the call was billed collect to another payphone or unbillable number, to an invalid or canceled credit/calling card, or there is no billing agreement with the serving LEC. Uncollectible revenues refer to bills that are rendered but not paid, due to inability or refusal of the billed party to pay. Outright fraud, a problem endemic to the toll industry, can create either type of problem.

within the smart phones from the major manufacturers. Store-and-forward systems enable the payphone itself to generate the "bong" tone, record the calling card or other billing information, dial the call directly over the chosen IXC, and time the call. The data is stored in the memory of the phone, to be retrieved electronically later, typically late at night when the phone is idle and rates are low.

Most users of store-and-forward systems "poll" their phones every night to retrieve the billing information, as well as data relating to the amount of coin traffic, condition of the phone, etc.

Store-and-forward, which can be used for most "O+" calls, eliminates the need to hand off the call to an OSP, potentially cutting out the OSP fees. Offsetting this, however, is the need to do some sort of validation of the billing information to prevent runaway fraud. In addition, the payphone operator still has to find some way to actually bill for the non-coin calls, and will bear the risk of unbillable and uncollectible calls.

Smart phones also have the ability to automate collect calling, although the service has not achieved wide acceptance by users. In such an application, the caller, after pushing the right buttons, is instructed by the synthesized voice to record their own name. The phone then dials the requested number, with the connection to the calling party muted. When the called party answers, the phone says "you have a collect call from " [plays recorded name in callers own voice] "if you will accept the charges, please press '1'." Again, the phone stores the billing data, which in this case consists of the called number, as well as the time and duration of the call. The system still needs some way to validate (or "qualify") the called party to insure that it is not an unbillable number (such as another payphone, for example), and the task of rendering the bill to the called party remains. But again, the need for the live operator is eliminated.

## The Evolution of Competition in the Payphone Industry

Table 2 provides a capsule chronology of important events leading to the current deregulatory thrust of the recent FCC payphone order. The text expands on considerably[29].

[29] Actually, hard though it is to believe, the table could have been a lot longer if it included all the interim events leading up to the deregulation of ordinary CPE. The telephone industry, led by AT&T, fought a titanic battle to keep control of the CPE market despite the best efforts of the FCC and others to open it up, with many trips to the courts and back. The same could be said for the eventual introduction of competition into the long-distance portion of the business.

## TABLE 2

## HISTORICAL MILESTONES IN THE DEVELOPMENT OF THE INDEPENDENT PAYPHONE INDUSTRY

| | |
|---|---|
| **Jan. 1949:** | U.S. Department of Justice initiates an antitrust suit against AT&T and the "Bell System," seeking to end AT&T's monopolization of the market for telecommunications equipment sold to the Bell Operating Companies. |
| **Jan. 1956:** | AT&T and the DOJ reach a "consent decree", under which AT&T retains its monopoly over telecommunications equipment, including provision of payphones and other end-user equipment. However, AT&T essentially gives up the semiconductor and computer industries, the second worst blunder in the history of the telecommunications industry. |
| **1956 - 1980:** | Payphone service provision essentially limited to the Local Exchange Telephone Companies in each service area. Competition forbidden. |
| **1980:** | FCC Order in the Second Computer Inquiry concludes that provision of Customer Premises Equipment is a competitive business, and orders carriers to form separate subsidiaries for CPE. Payphones are specifically exempted from classification as CPE, and are allowed to remain in the regulated rate base as part of network equipment. |
| **Jan. 8, 1982:** | AT&T and the U.S. Department of Justice agree on the Modification of Final Judgment that leads to the breakup of the former "Bell System." AT&T gives up control of 80% of the Local Exchange Telecommunications Industry. Thereby securing the third worst blunder in the history of the industry. |
| **Jan. 1, 1983:** | FCC deregulates all CPE installed on or after this date. Payphones still included in regulated rate base. |
| **Jan. 1, 1984:** | AT&T divests its LEC holdings by spinning off stock in the seven Regional Holding Companies. |
| **June 1984:** | FCC approves ownership of non-LEC owned "smart" payphones that can emulate central office coin services. LECs respond by creating COCOT tariffs. |
| **1984 - 1988:** | All payphones, including those operated by IPPs, are presubscribed to the IXC chosen by the provider of the *access line*, the various LECs. IPPs therefore unable to access the non-coin revenue stream. |
| **Oct. 1988:** | Judge Harold Greene, who oversees the MFJ, extends the "equal access" terms of the MFJ to provide that it is the *location owner*, not the serving LEC, who selects the IXC to which a payphone is presubscribed. For the first time payphone owners, including IPPs, can access non-coin or "operator handled" revenues by reaching contract agreements with IXCs and operator service providers. This gives rise to the "Alternative Operator Services" industry. |

| | |
|---|---|
| **1988 - 1990** | AT&T and other major IXCs respond to AOS threat by publicizing ways to "dial around" the presubscribed IXC and AOS provider at IPPs. IPPs respond by "blocking" caller access to non-revenue generating calls. This generates a flood of consumer complaints to the FCC and other authorities. |
| **Oct. 1990:** | The "Telephone Operator Consumer Services Improvement Act of 1990" ("TOCSIA") mandated that FCC take action to address problems of access, labeling, pricing in the industry. FCC in turn requires IPPs to unblock access to IXCs and OSPs, other than the ones presubscribed, but exempts inmate phones from such rules. |
| **May 1992:** | Responding further to TOCSIA, the FCC concludes that IPPs are due compensation for "access" 800 calls, but not for "subscriber" 800 calls. Lacking a tracking mechanism for dial-around calls, interim compensation set at $6.00 per month per phone. |
| **1992 - 1996:** | AT&T, other IXCs undertake a massive advertising campaign to educate payphone users on "800", other dial-around access calls. IPP non-coin calling volumes, revenues affected significantly. |
| **Jan. 1996:** | Telecommunications Act of 1996 enacted. Makes sweeping changes in local competitive outlook, mandates FCC provide compensation for "each and every completed ... call" using an IPP payphone. |
| **Sept. 1996:** | FCC issues Order mandating interim compensation of $45.85 per phone per month, with a transition to per-call compensation and local coin rate deregulation in one year (November, 1997). |
| **July 1, 1997:** | Appellate Court in Washington, D.C. sustains in part and remands in part provisions of the Payphone Order (see discussion below). |

Source: FCC Documents, HBW Research

Prior to the development of competition, payphone service was exclusively provided by the monopoly LEC serving each franchised market area and regulated primarily by the various state PUCs[30]. Although the regulated telephone companies seem able to come up with cost evidence to justify just about any rate structure they want, it is generally believed that in the past the true cost of payphone service was only partly covered by charges to the actual payphone users. The remaining portion of such costs was in fact subsidized thr interstate and intrastate revenue streams that unrelated to actual payphone usage.

As the industry painfully wound its way toward eventual 1983 deregulation of CPE, it was not what to do with payphones[31]. In 1980, the F

[30] We use the term "PUC" (for "Public Utility Commission") as a catch-all for the state regulatory authorities, to distinguish them from the FCC. In reality, the state commissions have varying names, depending on the whims of the legislature or drafters of the state constitutions: "The Illinois Commerce Commission", the Connecticut "Department of Public Utility Control," etc.

[31] The introduction of competition into the CPE portion of the r is an epic story in itself, one that would fill the pages of an Michener novel. In a nutshell, what happened was that, effect January 1, 1983, all newly-installed CPE was deregulatec excluded from the future rate base of the regulated comp Existing equipment that was provided under regulated rental remained so. Concurrent with the divestiture of the RHCs, retained ownership ("got stuck with") most of the installed b CPE, consisting largely of technically obsolete telephones systems, and PBXs. The availability of unregulated CPE advanced technology quickly destroyed the pre-1983 rental bas the result that AT&T's revenues from "rental revenue" declir

decision in the Second Computer Inquiry determined that end-user telephone sets and other CPE should be competitively provided, and in essence outlawed the traditional industry practice of "bundling" CPE with basic service rates. The CI-II order further ordered the BOCs (and, by extension, all LECs) to establish separate subsidiaries for the provision of CPE.

With regard to payphones, the regulators ducked the issue by declaring that, unlike ordinary home or business equipment, payphones could not readily be "unbundled" from basic exchange service, and therefore were not really CPE, but part of "network" equipment. The seemingly strange result was that payphones were therefore eligible to remain within the regulated rate base. (And, of course, therefore entitled to generate the regulated "rate of return", regardless of whether or not the revenues generated by the payphones themselves were profitable.)

At the time of the breakup of the "Bell System," therefore, payphones were regarded as part of "basic local service," and remained with the regulated BOCs. An exception was made in the case of "coinless" payphones of the type often seen in airports and other high-traffic locations. Such coinless payphones are primarily used for long-distance calling (nobody in his right mind would use an operator or calling card rather than a quarter to make a local call – the surcharges from a coinless payphone would be many times the cost of the local call). As a result, AT&T retained control of the coinless phones.

Although not itself directly a result of the divestiture, the emergence of the competitive CPE business made it possible, for the first time, for members of the general public to install coin-operated telephones of their own. Particularly in locations where there was a demand for public phone service, entrepreneurs and location owners alike recognized that there should be an opportunity to generate revenue if the payphones provided by the LECs could be replaced by customer-owned units. There had, of course, been a long-standing "gray market" segment of the business, consisting of individual subscribers who would charge others some nominal rate to make local calls from an ordinary business or residential phone[32].

## Early IPPs and COCOT Tariffs

In June of 1984, in an expansion of its competitive CPE policies, the FCC approved the operation of independently owned payphones. However, because the LECs themselves did not have a public tariff for provision of ordinary coin-line service, it was not available to the potential competitors. Instead, the various LECs filed new tariffs, generally providing for special rates for something they called "Customer-Owned Coin-Operated Telephone" (COCOT) service. Given the general belief that payphone service is not very profitable for the LECs, it is not entirely clear why they did not immediately establish tariffs for coin-line service such as they provided for their own payphones. If such tariffs could be established on profitable terms, it could provide a graceful way for the LECs to exit from a business that is marginally profitable at best.

One possible conclusion is that the lack of a coin-line tariff application was just one of the ways the LECs obstructed the development of competition in the payphone business. Or it may be that they truly do not have the systems and technology in place to enable them to provide coin line service to innumerable small subscribers. Or, it may be that they simply don't know what the cost of coin line service is, since the software, switching, and other functions necessary to provide it are embedded in the network equipment infrastructure. More likely (in my opinion), is that an attempt by the LECs to cost-justify a coin line tariff would make it painfully obvious that the basic local coin rate has been highly subsidized for decades, and that such end-user pricing is blatantly anti-competitive. In other words, their coin line tariff would have to be so high as to make it obvious that if they charged their own phones such a rate, they would be losing money. Such evidence would be embarrassing for the telephone companies and regulators alike, who would have to admit (once again) that some of their services are money-losers with no real economic justification, subsidized by the general body of rate payers.

COCOT lines are essentially identical to ordinary residential or business access lines, providing dial tone, ringing current, and not much else[33]. By a strange

alarming rates in the early years following divestiture. Today, the CPE market is almost entirely competitive, and the LECs themselves only a minor factor.

[32] Such "resale" of local or long-distance service by a subscriber is technically in violation of the phone company "terms and conditions" of service, unless the subscriber has jumped through a number of regulatory and legal hoops.

[33] Slight exaggeration. In a completely unbundled world, it would be clear that even a basic POTS line includes a lot of service elements.

coincidence, however. COCOT lines happened to be tariffed at rates higher than equivalent facilities provided under either residential or single-line business tariffs. This tended to put independently-provided payphones at an economic disadvantage, particularly in light of the fact that the LECs, then as now, did not necessarily recover the full cost of their own coin lines through the payphones themselves. In addition, because the local telephone companies retained control of the COCOT lines, it was the LECs that decided which interexchange carrier should be "presubscribed" to the long distance calls made from each payphone, and of course their choice was AT&T.

As a result of this, the early IPPs had no way to tap into revenues generated by the higher-priced toll calls originated from their instruments. They were essentially limited to collecting the coins deposited, primarily for basic-rate local and sent-paid toll calls, and even this limited revenue source required the installation of what have become known as "smart" phones, to provide some of the services (rate & route, collect/return, etc.)

## "Presubscription" Opens the Toll Market to IPPs

The economics of the Independent Payphone Industry changed significantly in October of 1988, when Judge Harold Greene extended the presubscription terms of the MFJ to include payphones. Under his ruling, it was the location provider, not the local telephone company, that had the power to choose the IXC to which the payphone would be presubscribed. For the first time, location owners, or the IPPs who contracted with them for the locations, could reach agreements with IXCs to retain a portion of the non-coin revenues generated by their payphones.

One would think that, given this development, the LECs and the established interexchange carriers (AT&T, MCI, *et. al.*) would have fallen all over themselves in a rush to provide the transmission, routing, billing, and other services needed to implement the newfound toll capabilities of the IPPs. But they didn't. Again, the

the list of which could include (a) interstate access (b) "911" access, (c) "O+" access ("bong" tone), (c) "O-" access (live operator), (d) "OO" access (interexchange carrier operator), (e) rotary/DTMF conversion (when needed), (f) Directory Assistance access, and (g) many others. However, my point is that a POTS line does not provide those features – such as answer supervision, rate and route, and collect/return current – that are essential to operation of a LEC payphone.

reasons are not entirely clear, but the fact is that to day the established telephone companies, de decades of experience in provision of operator serv still do not offer such service to independent payp providers. In the case of the BOCs, the MFJ restric on participation in the InterLATA service prot would make it impossible for the BOCs to provide completion, but there is no reason why those LEC subject to the MFJ could not enter the market if wished.

But in any event, they didn't, and the industry spurred to introduce the full-blown "smart" phone, the Alternate Operator Services industry.

Immediately following the opening of the form monopoly business of providing telephone ser through coin and non-coin public payphones w period of mass confusion. Entrepreneurs of every st from multiple location owners such as gas station ch to vending machine route operators, to multiple-l sales organizations, to limited partnerships enterec business, with a few outright scams thrown in.

Because the management of payphones had been m or-less left up to the telephone companies under former monopoly structure, there was signifi latitude in most cases for the new entrants to c service under different terms and conditions than th to which the regulators and using public had bec accustomed. In most cases these took the form of hi prices, a lower level of service, or both, and promptly labeled "abuse" by critics of the industry. new entrants, having the freedom to pick-and-cho attempted to secure only the "best" payphone locati thereby threatening to leave the Local Exch Telephone Companies with all the unprofitable, car of-last-resort business that nobody else wanted.

In response to the new industry, regulators legislators, no doubt heavily influenced by the pow local telephone companies, attempted to set new r to cure some of the perceived "problems", including of revenue of the telephone companies themse Coupled with the normal shakeout period in any industry, the restrictions on the new entrants generat rash of failures, withdrawn service offeri disappointed investors, and adverse publicity generated an adverse reaction in the investr community.

## "Dial-Around" Traffic and "Blocking"

(Beginning with a brief philosophical digression)

Some place in this report, we need to comment on the differing points of view of the IXCs, LECs, and IPPs regarding the development of competition in the industry, and this might as well be it: they are all right! The tendency is to view the LECs and, to a lesser extent, the IXCs, as obstructive forces trying their best to stop a bunch of innovative, profit-driven entrepreneurs from doing the payphone business better. And of course that is about what happened. But a look at the situation should make it clear that the LECs and IXCs are not necessarily in the wrong on the issues.

Consider, for example, AT&T. Why shouldn't AT&T pay the IPPs a cut of the revenues that callers pay to AT&T for calls made from their phones? In a large sense, they should. A payphone is a capital asset, the IPPs have an investment in them, they are entitled to earn a reasonable return, etc., etc. But from AT&T's viewpoint, they are already paying the LECs on each end of the call a horrendous proportion of their toll revenues in the form of "access charges." And those access charges (up to now) already include a portion of the costs associated with LEC-provided payphones. In other words, AT&T (and, by extension, MCI, Sprint and the rest) are already paying for all the interstate costs of having payphones on the ends of certain access lines. Why should they pay yet another party an additional fee just because ownership of the payphone changed?

From the viewpoint of the LECs, they rightly point out that (a) they will lose the coin revenues from the phones, (b) the IPPs will engage in the dreaded "Cream-Skimming," taking away only the most profitable phones, and leaving the LECs stuck with the losers, and (c) the diversion of OSP calling to AOS companies (via toll-free calls, special access lines, and the like) robs the LECs of their per-minute interexchange access charges (at least on the terminating end), which are desperately needed to offset the woefully underpriced basic exchange rates.

The IPPs, of course, complain that (a) they are not charities, (b) they have a significant capital investment in the instruments, (c) under any notions of economic fairness, they are entitled to be compensated when their phones are used to provide a valuable service to the public, and (d) they don't get any of the access charge revenue that helps subsidize the LEC-provided payphones.

Finally, consumer groups and the regulators that presume to represent their interests complain that regulation is supposed to *decrease* prices to the public, not increase them, which seems to be the case here.

How can they all be right? Because pricing in the telephone industry still follows traditional practices of pursuing social, rather than strictly economic goals. The fact appears to be that payphone service, particularly the local coin rate, is just too cheap, as regulators have turned to other services, such as toll rates or other business charges to absorb most of the inflationary cost increases of recent decades. Here in Texas, for example, the 25 cent local coin rate first went into effect in 1979. Assuming that the price was "just and reasonable" when it was established at that time, how can it be that it is still considered a fair price after 17 years of inflation that has more than doubled the level of consumer prices generally? Yet within the last year the Texas PUC refused to increase the basic coin rate.

The American public has been sold the story that "competition lowers prices" for so long that it is hard for them to accept the fact that in the case of payphone service, a level playing field will mean that prices have to go up!

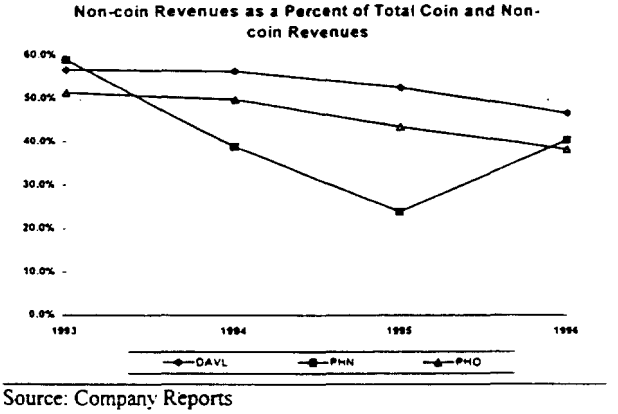
With that said, what about this "Dial Around" issue? So far, we have traced the development of competition through the early days of coin-only to the extension of presubscription to the location owner and, by extension the IPPs.

Concurrent with other events in the industry, the FCC-ordered move to "equal access" carried with it the establishment of something called "Carrier Identification" or "Primary Interexchange Carrier" ("PIC") codes. These five-digit codes took the familiar "10XXX" form. AT&T, for example is 10288, or "10ATT" . By dialing these codes from most normal residential or business lines, you can reach the dial tone of any of the interexchange carriers that happen to offer service in your area.

When the IPPs started presubscribing to other IXCs in order to share in the toll revenues generated, AT&T and the other IXCs struck back with an educational

campaign to tell the public how to reach them through the "10XXX" codes. This presented a real problem for the IPPs, because of the loss of revenue on the most profitable calls. The smart phone appeared to come to the rescue, as the IPPs simply programmed the phones to "block" 10XXX access codes. Instead of hearing the Zen-like tinkling tones and "welcome to AT&T," callers heard a shrill, synthetic voice saying "that call cannot be completed from this telephone," or some such.

**Figure 4**




Source: Company Reports

Next, the industry retaliated by developing alternative access methods, chief among which were the "800" access numbers, such as "800 CALL ATT" (really, of course 800-225-5288), "800 OPERATOR" (MCI), etc. The IPPs blocked them, too, in some cases going so far as to block *all* 800 calls.

This generated an uproar in the industry, and led to a clamor by well-meaning but naive consumer advocates for industry reform, including something called "Billed Party Preference", or "BPP."

## Billed Party Preference

In response to widespread complaints relating to the deadlock in the industry between the IPPs blocking access to non-paying calls (a reasonable action) and the obvious desire to facilitate use of the phones, the FCC in May of 1992 began something officially called "CC Docket 92-77." Familiarly known as the "Billed Party Preference" inquiry, the FCC took a look at the very sensible notion that whoever is actually going to end up paying for a long-distance call (or any other telephone charge, for that matter), should pay it to the service provider that they prefer to use. In other words, the c should be carried by the carrier chosen by the pa footing the bill.

In the case of ordinary residential or business calli the subscriber to the LEC access line has the abilit "presubscribe" to any of the innumerable entities (th are more than 500 today) that provide interexchar service. Every interexchange call then made from t phone, other than access code calls, will be carried the carrier preferred by the billed party.

Provision of BPP to a payphone user is a bit m complicated, since the "subscriber" to the LEC serv is the location owner, who will not pay for the act calls. In the case of a payphone call made on, say, MCI Calling card, the caller has, we suppose, reasonable right to expect the call to actually be carri on the MCI network and billed to him by MCI. T would require the PSP to have some way of identifyi the company that has issued the calling card numb input by the caller. Modern data base inquiry a validation systems make this a manageable burden the PSP. But what about a call charged to, say, a ba credit card? Now somebody would have to maintair data base and validation system with information every bank card issued to every potential caller. T difficulty becomes greater. Finally, consider a coll call. To implement BPP on collect calls, the P handling the call would have to have some way determine, in real time, the IXC to which every sing access line in the country is subscribed, before it cou even be determined which IXC or OSP the call shou be routed to for processing.

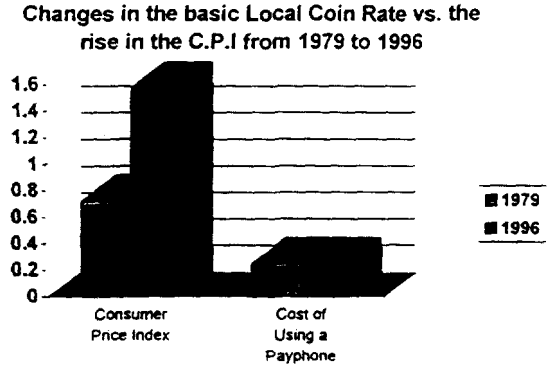
What's worse, under the system provided, BPP wou apply not just to payphones or other public access lin but to *every single access line in the count* Presumably this would even include residential acc lines, so that if someone such as a visitor in your hor or office made an "800" or collect call from your ov line, the system would still have to route the call ov that callers preferred carrier, not yours. Given that the are thousands of changes per hour in I presubscriptions across the country, the task of creatir managing, and maintaining such a data base becom huge.

After a protracted investigation, the FCC issued Further Notice of Proposed Rulemaking in May of 19 in which they noted that the best evidence was th

although BPP was technically possible, it would take several years to implement, and would carry an initial $1.1 billion up-front price tag, plus annual costs of around $420 million, to generate an estimated annual saving to the public of $340 million, plus unquantifiable benefits in terms of increased competitiveness, consumer satisfaction, etc.

At this time, BPP remains an appealing idea that is simply not practical. Fortunately, TOCSIA and the later 1996 ACT (and the subsequent FCC Payphone Order) defused the issue at least temporarily, and BPP now appears to be an issue only in the case of inmate service.

**Figure 5**




Source: CPI: U.S. Department of Commerce, Statistical Abstract of the United States, 1995, 115th Edition. Local Coin Rate: SBC Communications (in Texas)

## 1990: TOCSIA

In 1990 Congress responded to the widespread complaints regarding poor service, high rates, and other problems in the industry through legislation with the unlikely title of the "Telephone Operator Consumer Services Improvement Act," promptly dubbed "TOCSIA," although nobody ever seemed to know how to pronounce it. Among other things, the legislation required IPPs and other "service aggregators" to unblock access to non-presubscribed IXCs, to quote their rates upon request, and to provide various notification and posting features at their payphone locations, including the address of the FCC enforcement division, to which complaints could be directed.

TOCSIA also directed the FCC to determine whether IPPs should receive compensation for originating interstate calls (the jurisdiction of the FCC), to non-presubscribed IXCs that traditionally had not paid for such calls. The FCC, in an uncharacteristic fit of sanity, concluded that the best method would be a method of per-call compensation for all calls made from payphones, including "800" subscriber calls.

However, the FCC also concluded that no mechanism existed to accurately track dial-around calls at the time, and directed that an interim compensation of $6 per phone per month should be paid to each payphone by the interexchange carriers as a group[34]. This relatively low amount was justified by the somewhat nonsensical conclusion of the FCC that compensation should be based on only 800 access calls, and not 800 subscriber calls, even though all the other parties to such calls made money on them.[35] But even $6.00 per month was better than nothing.

Subsequent to the implementation of the TOCSIA mandate to unblock dial-around access, it became possible for the IXCs to aggressively promote their dial-around access numbers, which they did, frequently placing huge advertisements in locations adjacent to IPP instruments. Following their loss of the Atlanta airport contract, for example, AT&T advertised on huge posters reading "How do I reach AT&T at this Airport?", with detailed dialing instructions. At the same time, AT&T and Sprint struck deals with the IPPs, and received approval from the FCC, to implement per-call compensation of $0.25 per call[36]. The FCC later issued

[34] This lack of tracking ability may be puzzling at first, since the telephone industry obviously has an elaborate system to track, record, and bill for telephone calls of all kinds. However, note that in the case of "800" service, it is the recipient of the call who is the subscriber who pays for it, and the originating LEC gets the interstate access charge merely for handing the call off to the appropriate IXC. In each case, it does not matter where the call originated, since the originating party is not billed in any way for normal 800 calls. If fact, that is the whole idea of 800 service in the first place. As a result, the telephone industry has never created any such tracking system, because until the issue of per-call compensation came up, it would have had no value to anybody.

[35] The IXCs providing the 800 service of course profit from both the flat monthly rate and the per-minute usage charge on calls to an "800" subscriber. The LECs that carry the call from the IPP to the IXC get the interstate originating access charge and, of course, the LEC on the terminating end of the call gets the "special access" fee from the subscriber. Only the IPP was left out of the transaction.

[36] Based on the reasonable observation that AT&T probably doesn't do anything out of generosity, why did they do this? Primarily because the FCC had ruled that the IXCs had to kick into the $6.00 monthly interim dial-around compensation on a *pro rata* basis, depending on their relative share of total long-distance revenue. Since AT&T has much greater share of the total toll market (which includes the relatively high-priced residential segment), but a lower share of the "800" market, they probably came out far ahead by going to a per-call system in the interim.

a Notice of Proposed Rulemaking suggesting that all IXCs should be required to pay on a per-call basis. (That proceeding, of course, has been superseded by the 1996 Act and subsequent Payphone Order.)

In July 1992, in its "Subscriber 800 Reconsideration Order", the FCC affirmed its claim that, although the IXCs were required to compensate the IPPs for 800 access calls, the order did not apply to 800 subscriber numbers. The differentiation was based on the Commission's assertion that compensation was due only on "access code calls," which of course are not required on an ordinary "800" call[37]. The FCC, after a year and a half of deliberation, decided that only 800 access calls were deserving of compensation, and set the "interim" amount (until a per-call system could be put into effect) at $6.00 per IPP phone per month. This distinction seemed a bit artificial, since either type of "800" call uses exactly the same features of both the payphone itself and the LEC switching and transmission facilities.

Apparently the IPP industry felt the same way, because, with the American Public Utilities Council (APCC) and the Florida Pay Telephone Association taking the lead, the FCC's distinction between 800 access and subscriber calls was appealed to the U.S. Court of Appeals for the District of Columbia. The court, apparently as mystified as anyone with the FCC reasoning, promptly found no reason to distinguish between subscriber and access 800 calls, and remanded the Order to the FCC for further consideration. This proceeding, which is officially still pending has effectively been resolved by the current rulings.

## The Telecommunications Act of 1996

Efforts have been under way for decades to rewrite one or another part of the Telecommunications Act of 1934, which has been substantially amended since first passed. In 1996, after an intense period of lobbying and industry commentary, Congress passed and President Clinton signed into law the Telecommunications Act of 1996, which mandates a number of significant changes in the regulations affecting the industry. Among these are a number of measures with the twin goals of relaxing the current antitrust and other restrictions on the BOCs an other LECs, at the same time opening up the loca exchange business to competitive entry.

One Section of the 1996 Act, Section 276, specificall addresses the payphone industry, which is identified a the "Payphone Service Provider" or "PSP" industry. I itself, this is significant, as the federal government is n longer making a distinction between LEC an "independent" payphones. Although this is just at th verbal stage at present, the fact that the industry is bein viewed as a whole indicates the intent to move towarc more of a "level playing field" than in the past.

Among other provisions, Section 276 contains languag requiring "that all payphone service providers are fairl compensated for each and every completed intrastat and interstate call..." made from their payphones. A one might imagine, this has touched off a fierc controversy over what constitutes a "completed call" but the important language is the "each and "every[38]". The Act also requires that the FCC modify th calculation of the interstate access charge t "discontinue the intrastate and interstate carrier acces charge payphone service elements and payments ... an all intrastate and interstate subsidies from bas exchange and exchange access revenues." What th basically means is that the LECs will no longer be abl to make a profit elsewhere in their regulated business b installing and maintaining unprofitable payphones.

Third, The Act also ordered the FCC to consider mechanism under which the BOCs, although forbidde (at least for the time being) to participate in InterLAT

[37] "800" toll-free numbers (they are not really "toll-free", of course, since the *called* party has to pay for the service are assigned to those specific carriers that have sold the 800 service to the subscribers. Therefore, only those carriers can complete the calls, which *must* be forwarded to them by any originator of the call, IPP or not.

[38] Two comments: First, with regard to "completion" there a several areas of contention. To take just one as illustration, it seen fairly clear that an "800 access" call is completed when the calli party is connected to the IXC whose 800 number he has dialed. Th is, after all the purpose of the "800" number, and the PSP should b compensated, regardless of whether or not the caller actually ev completes a toll call over that particular IXC. Thus, in the case uncompleted IXC access calls (busy, don't answer, or early hang-ups the IXC generates no revenue, but still has to pay the PSP for the ca But what about "subscriber 800" calls. The PSPs say, "what's th difference", because the call is "completed" when we hand it off to th IXC carrying the 800 call, just as is the case for an 800 access cal But the IXCs argue that since the intent of the caller is to connect the *subscriber* of the 800 service, not the IXC (in fact the call probably doesn't know, or care who the IXC is), the call is n "completed" for compensation unless the called party actually answe the call. Second, with regard to "each and every," note that the A and the FCC Order make two general exceptions, for "911" emergenc access, and for telephone relay services for the deaf. Although th economic arguments for compensation on such calls are the sam they are politically untouchable icons at present, which the IPPs a unlikely to challenge.

traffic, could nonetheless "participate" in the location owner's selection of the IXC serving the phone. This provision would actually strengthen the BOCs competitive position, as they could then bargain on behalf of the location owner for a cut of the IXC revenues.

Finally, and perhaps most importantly, Congress lit a fast-burning fuse on the issue, mandating that "... within 9 months after the date of enactment of the Telecommunications Act of 1996, the Commission shall take all actions necessary (*including any reconsideration*), to prescribe regulations ...." (Emphasis ours).

This meant that all the normal FCC proceedings in this regard had to be wrapped up by November 8, 1996, a remarkably tight schedule which, equally remarkably, they did meet.

## Order on Reconsideration

On November 8, the last day of the nine-month interval specified in the ACT, the FCC issued its order on Reconsideration. One benefit of the very tight time schedule is that only 28 parties filed Petitions for Reconsideration, and only 20 filed comments in return. In a nutshell, the FCC confirmed the essential findings of the Payphone Order, and thus set the stage for further appeal to the courts.

### The Payphone Order

In response to the Section 276 mandates, the FCC on June 4, 1996 adopted a Notice of Proposed Rulemaking establishing CC Docket No. 96-128. The commission, responding to the Congressional mandate, set an unusually tight time schedule, with only three weeks allowed for submission of comments, and a little over one week for replies. On September 20, the FCC released a 189-page order which, with minor modifications and clarifications on reconsideration, established new ground rules for the payphone industry. The following is a summary of the more important terms of the order.

### Jurisdiction

The FCC's order generally preempts state (and, by implication, municipal) regulation of payphone service providers, and forbids states from outlawing privately-owned payphones. At the same time, the FCC ducked the issue of so-called "public interest payphones," delegating responsibility for placing, maintaining and funding them with the states.

### Dial-Around Compensation

The order mandates a move to "Per-Call" compensation for "800" and other "Dial-Around" calls including access code, prepaid calling card, and toll-free subscriber calls, phased in as follows:

The $6.00 per payphone per month flat interim compensation is increased to $45.85 for a "one-year" period (actually eleven months) to give the industry time to develop a per-call tracking system. Under the terms of the order, the new rate began to accrue in early November 1996, and runs for eleven months, through October 6, 1997. The $45.85 was based on compensation at the rate of $0.35 per call and the FCC's determination that the average payphone generated 131 dial-around calls per month.

After October 6, 1997 the industry is to move to a system of per-call tracking and payment, with per-call compensation set at either a default rate of $0.35 per "completed" call, or at a different rate negotiated between the payphone provider and its primary interexchange carrier (i.e. the one to which the phone is presubscribed). This process is to begin on October 7, 1997.

The third phase, set to begin on October 7, 1998, will continue per-call compensation, but the rate will equal either the local coin call rate for each phone, or a rate negotiated as above.

### Local Coin Rate Deregulation

States can continue to maintain, increase, or deregulate local coin rates during the first year but must eliminate local coin rate regulation at that time (i.e. on or before October 7, 1997). Payphone providers can charge whatever they want for local calls after the year is up, known as "market-based" pricing. However, the local coin rate must be prominently displayed on each payphone by 12/20/96.